BU/mo 031084US
21. Juni 2006

CLAIMS

1. A heat protection body (5) for a protection system for a furnace inner wall (1), having a front side (7), a rear side (8), and peripheral sides (11, 12, 13, 14) connecting the front side (7) and the rear side (7),
   - wherein the heat protection body (5) has in its rear side (8) at least one groove (6) to accommodate a retaining element (4),
   - wherein the groove (6) has a first face-side end (6a) open to a peripheral side (14) and a second face-side end (6b) located in the interior of the rear side (8), and
   - wherein the groove (6) has a cross-section which broadens from the rear side (8) in the direction of the front side (7).

2. The heat protection body of Claim 1, wherein the heat protection body (5) is designed as a plate-shape.

3. The heat protection body of Claim 1 or 2, wherein the groove cross-section broadens step by step from the rear side (8) in the direction of the front side (7).

4. The heat protection body of Claim 3, wherein the groove (6) has a T-shaped cross-section.

5. The heat protection body of Claim 1 or 2, wherein the groove cross-section broadens constantly from the rear side (8) in the direction of the front side (7).

6. The heat protection body of Claim 5, wherein the groove (6) has a trapezoidal cross-section.

7. The heat protection body of any one of Claims 1 to 6, wherein the groove cross-section tapers in the longitudinal direction of the groove (6) from the peripheral side (14) inwards.

8. The heat protection body of any one of Claims 1 to 7, wherein the heat protection body (5) is manufactured from a ceramic material, preferably silicon carbide.

9. The heat protection body of any one of Claims 1 to 8, wherein at least one peripheral side (11, 12, 13, 14) has a step running essentially parallel to the front side (8).

10. The heat protection body of any one of Claims 1 to 9, wherein the rear side (7) is shaped to the outer contour of the furnace wall (1).

11. A protection system for a boiler tube wall (1) having at least one retaining element (4) projecting from the boiler tube wall (1) and at least one heat protection body (5) held by the retaining element (4) according to one of Claims 1 to 8, wherein the retaining element (4) has a free end (4a) corresponding to the cross-section of the groove (6).